

THE MINERAL INDUSTRY OF

HONDURAS

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The Republic of Honduras is in Central America on the isthmus between Mexico and Panama. The country is mountainous, except for a coastal plain in the north.

Honduras ranked among the least developed countries in the Western Hemisphere. Industrial production has diminished and foreign investments were low. Shortages of fuel oil and rainfall, reducing hydroelectrical plant outputs, caused electricity black-outs from 6 to 14 hours per day.

The El Mochito Mine was the only large operating metal mine in Honduras. Lead and zinc concentrates from the mine contributed less than 2% to the gross domestic product, and less than 0.3% of the labor force was involved in mining. The mineral resources of Honduras consisted of coal, copper, gold, gypsum, lead, salt, silver, zinc, and some marble.

The mining laws in Honduras date from 1968, 1982, and 1987. The hydrocarbon law, Decree 194-84, covers the petroleum industry. The petroleum and minerals law, Decree 123-90, was passed in October 1990. The general mining code was passed in February 1991. A new mining code was to be proposed in 1994. The State was the owner and exercised direct authority over all mines, but granted rights for reconnaissance, exploration, and exploitation purposes to individuals or corporations within the terms of the general mining law.

All companies in Honduras were required to be registered with the appropriate Government Ministry, such as the Ministry of Natural Resources for mining companies, and were required to have a labor force that is 90% Honduran. Exclusive exploration concessions to foreigners were granted for 4 years and were renewable for 2 years. Mining concessions were granted for 40 years.

Cia. Minera Santa Barbara S.A. operated only one large metal mine, El Mochito gold mine, near Lake Yojoa. The lake was considered by many as recreational, attracting bass fishermen from the United States. Much of the mine drainage and tailings runoff flowed into the lake. The mine produced gold, lead, silver, and zinc. Reportedly, the Government was attempting to solve this problem by soliciting advice from environmental experts.

The Honduras Ministry of Environment was established in 1993. Plans to build an oil refinery in Puerto Castilla, Trujillo Bay, were shelved in 1994 because of protests from the local residents. Environmentalists, fishermen, Garifuna Indians, and tour guides who live along the bay mobilized an opposition movement against the refinery.²

Honduras produced lead and zinc concentrate in the El

Mochito Mine as a byproduct. Cadmium, copper, gold, and silver also were produced, but contributed little to the Honduran economy. Industrial minerals included cement, gypsum, limestone, marble, and salt. (*See table 1.*)

Honduras was a beneficiary of both the Caribbean Basin Initiative and the Generalized System of Preferences, and is a member of the Central American Common Market. In April 1994, Honduras signed the General Agreement on Tariffs and Trade. In 1994, Honduras became a member of the Association of Caribbean States.³

Honduras exported about 40% of its metals to Europe and some to Japan, Mexico, the United States, and Venezuela. The country imported all of its oil requirements, more than 3 million barrels of crude oil, primarily from the United States. Mexico and Venezuela also supplied crude oil under the San José Accord.

The 14 commercial banks operating in Honduras accounted for more than 80% of the Honduran financial system's assets. Foreign companies are allowed to borrow from the commercial banking system under the same conditions as local firms.⁴

Mineral, petroleum, and natural gas deposits were owned by the Honduran Government. All deposits were available for exploration by private companies through concessions. The private sector directed the mining industry and petroleum refining activity. The Bureau of Mines and Petroleum (Dirección General de Minas e Hidrocarburos) issued mining and petroleum concessions and registered exploration and production companies. The El Mochito Mine was owned by a Canadian company, Breakwater Resources, Ltd., Toronto. There were several small mines, some operated by United States and Canadian companies. (*See table 2.*)

Honduras hosts a rich diversity of mineral deposits. The following metal deposits, according to the Government, are available for further exploration: copper and silver (El Ocote); gold (Baldaquin, Bambu, Calpules, Chaguites, Chaparrales, Hot Springs, Las Minas, Potosi, Tembladera, Tutumbla); gold, lead, silver, and zinc (Cedros); gold and silver (Yuscaran); and silver (El Rosario). The small Baldaquin gold mine is now in production, employing about 80 local workers, producing several metric tons (mt) of ore per day. The ore is the roasted, crushed, and amalgamated with mercury to extract the gold. The Hot Springs gold mine, 128 kilometers (km) south of Tegucigalpa, reportedly started production in July 1994.⁵

Most of Honduras' gold and silver production came from

the El Mochito Mine, which also produced lead and zinc. The mine was the largest in Central America, with a capacity of about 2,500 metric tons per day.

The San Andrés Mine is the second largest gold producer in Honduras. The San Andrés Mine is 150 km southwest of San Pedro Sula. In fall 1994, Greenstone Resources Ltd. acquired a 51% stake in the mine from Compañía Minerales de Copán S.A. de CV, a subsidiary of Fischer-Watt Gold Co., Inc., of Sparks, Nevada. Gold reserves of the deposit were estimated at 5.6 million metric tons (Mmt) at a grade of 3.2 grams per metric ton of gold, containing 18 mt of gold.⁶ Greenstone was also negotiating with the Honduran company to acquire an additional 20% stake in the gold mine.⁷

Melinga Resources Ltd. (MR), Vancouver, Canada, drilled for gold in three areas of its Veltas del Río and Nelson zones on the Maculizo concession in northwest Honduras. The area has been already drilled by several groups, including the United Nations and a Japanese-supported group.

Aurora Exploracion (Honduras) S.A. de R.L. obtained 15 exploration permits to search for gold in Chameleon/Coyolar area, southeast of Tegucigalpa, where the presence of lead-zinc-gold metal mineralization was detected. In early 1994, Consolidated Ramrod Gold Corp., Vancouver, Canada, signed a letter of intent to acquire up to 51% of Aurora's 1,265 square-kilometer concession, also including the Calpules and Chaparrales prospects.⁸

The El Mochito Mine is the largest lead-zinc mine in Central America. Since 1948, more than 11 Mmt of ore has been extracted, containing 750,000 mt of zinc, 500,000 mt of lead, 300,000 mt of copper, and more than 3 million kg of silver. Reportedly, the deposit has 4.3 Mmt in reserves, grading 1.89% lead, 7.92% zinc, 0.27% copper, and 68.4 gm silver. The mine was operated by Cia. Minería Santa Barbara S.A., a wholly owned subsidiary of Breakwater Resources.

In Honduras, the Cementos de Honduras S.A. (CH) is the largest cement company, followed by the Industria Cementera Hondureña S.A. de C.V., with capacities of 600,000 metric tons per year (mt/a) and 450,000 mt/a, respectively. Both companies are privately owned. In early 1994, workers at one of the cement plants went on a strike resulting in a decline in production.⁹

Honduras produced salt in the Choluteca district, in the southwestern area of the country. Gypsum and marble were produced primarily for export, and limestone was used in local cement plants.

About 500,000 barrels of oil were pumped out annually by the Texaco Inc. near the Mosquitia coast. Honduras has a number of undeveloped oil basins, including Matique, Olancho, Tela, and Ulua. Colombia, Mexico, and Venezuela supplied crude petroleum to Honduras. Honduras imported petroleum products for domestic consumption.

Only 1,700 km of the 8,950 km of roads were paved in Honduras. Access to rural areas remained difficult. There was 785 km of railroad tracks along the Caribbean coast. Puerto Cortés served as a shipping port for exports of metals.

The Government-owned National Electric Power Co. of

Honduras or Empresa Nacional de Energía Eléctrica (ENEE), had an installed capacity of 575 megawatts (MW). The country was importing electrical power from Nicaragua. The Government also considered importing electricity from Costa Rica because of the low water level in its main hydroelectric powerplant, Francisco Morazan, on the north coast of Honduras. The plant's capacity was 300 MW.

A 60-MW diesel-powered electric plant was being built at Puerto Cortes and was to be put into operation on January 1995. About 15% of the output would be sold to Honduras Electric Company S.A. de C.V., and the rest to ENEE, under a 15-year agreement.

In Honduras, only one refinery operated privately, Refinería Texaco de Honduras S.A., in Puerto Cortes, Trujillo Bay. The refinery relies entirely on imported crude oil.

Until recently, the country received little attention from mineral exploration companies. Currently, several international mining companies are exploring for metals in Honduras. Some mines were opened in the past decade, and several are now in production, but the majority need additional evaluation to determine their potential viability. Only about 10% of the Nation has been geologically mapped at a scale of 1:50,000 for use in exploration projects, despite the fact that former gold mines exist in 16 of the 18 Honduran provinces. The new administration in Honduras reportedly intends to promote and support the mining sector and enact a new mining code. A better understanding of the geology in Honduras could lead to the discovery of additional ore deposits.

¹Text prepared May 1995.

²San Francisco Chronicle (San Francisco, California): Aug. 8, 1994.

³Latin American Economy & Business (London): May 1994, p. 20. U.S./Latin Trade (Miami, Florida): Sept. 1994, p. 16.

⁴The Latin American Times (London): Apr.-June 1994, p. 9).

⁵Randol International Ltd. (Golden, Colorado): Fall 1994, p. 23.

⁶LatinoMineria (Santiago): May 1994, p. 46.

⁷The Northern Miner (Toronto): Nov. 14, 1994, p. 19.

⁸Engineering & Mining Journal (Chicago, Illinois): May 1994, p. 16. Latin American Mining Letter (London): July 29, 1994, p. 8. Mining Journal (London): July 29, 1994, p.76.

⁹Latin American Economy & Business (London): Apr. 1994.

Major Sources of Information

Dirección General de Inversiones y Promoción de Exportaciones

Ministerio de Economía y Comercio

Plaza Peatonal, Edif. Salame, 4to. Nivel

4ta. Calle, 4ta. Avenida, Tegucigalpa, DC, Honduras

Dirección General de Minas e Hidrocarburos

Ministerio de Recursos Naturales

Boulevard Miraflores, Tegucigalpa, DC, Honduras

Telephone: (504) 32-7848; Fax: (504) 32-5375

Fundación Para la Inversión y Desarrollo de las Exportaciones

(Apartado Postal 2029)

Centro Comercial Maya, 2do. Nivel

Boulevard Morazan, Tegucigalpa, DC, Honduras
Telephone: (504) 32-0937; Fax: (504) 32-1808
Honduras Information Service
501 Fifth Avenue, Suite 1611
New York, New York 10017

Major Publications

Banco Central de Honduras, Departamento de Estudios
Económicos Honduras en Cifras, annual.
Johnson, Michael D., Mining and Mineral Deposits of
Honduras and El Salvador: Fischer-Watt Gold Co., Inc.,

Randol International meeting, Acapulco, Mexico, October
26-27, 1993.
Latin American Mining Institute, Washington, DC: Mexico
and Central America Investment and Mining Guide,
annual.
Ministerio de Recursos Naturales, Dirección General de
Minas e Hidrocarburos and Bureau de Recherches
Geologiques et Minereres. Special Reports.
Yuscaran Precious Metals Deposit, International Bid:
Secretaria de Recursos Naturales, Tegucigalpa, Honduras,
Aug. 1993.

TABLE 1
HONDURAS: PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Metric tons unless otherwise specified)

Commodity	1990	1991	1992	1993	1994 e/
Cadmium, Cd content of lead and zinc concentrates	372	212	333	113 r/	46 3/
Cement	652,000	693,000	650,000 e/	645,000 e/	645,000
Copper, Cu content of lead and zinc concentrates e/	1,390 3/	1,000	1,600	1,000	1,000
Gold	kilograms 156	180	163	111 r/	106 3/
Gypsum e/	25,000	27,000	26,000	25,500	25,500
Iron and steel: e/					
Steel, crude	8,000	-- r/	-- r/	-- r/	--
Semimanufactures	15,000	-- r/	-- r/	-- r/	--
Lead, mine output, Pb content	5,790	8,720	10,800	3,550 r/	2,810 3/
Petroleum refinery products 4/	thousand 42-gallon barrels 3,110	3,000 e/	1,900	1,900 e/	1,900
Salt e/	30,000	30,000	30,000	30,000	25,000
Silver	kilograms 31,100	39,400	42,800	23,900 r/	24,900 3/
Stone:					
Limestone e/	460,000	500,000	450,000	400,000	400,000
Marble	square meters 84,400	95,900	100,000 e/	95,000 e/	90,000
Zinc, mine output, Zn content	29,600	38,300	29,000	18,300 r/	16,700 3/

e/ Estimated. r/ Revised.

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits.

2/ Includes data available through Apr. 20, 1995.

3/ Reported figure..

4/ Includes LPG, aviation and motor gasoline, diesel, kerosene, and distillate fuel oil.

TABLE 2
HONDURAS: STRUCTURE OF THE MINERAL INDUSTRY FOR 1994

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement		Cementos de Honduras, S.A. (private, 100%)	Río Bijao plant., San Pedro Sula, Cortés Department	600
Do.		Industria Cementera Hondureña, S.A. de C.V. (private, 100%)	Piedras Azules plant, Comayagua Department	450
Gold	kilograms	Compañía Minera Santa Bárbara (Breakwater Resources Ltd., 100%)	El Mochito Mine, Santa Bárbara Department	300
Do.	do.	Cía. Minerales de Copán, S.A. (Madeleine Mines, 25.5%; Milner Consolidated Silver Mines, 25.5%)	San Andrés Mine, Copán Department	150
Lead		Cía. Minera Santa Bárbara (Breakwater Resources, Ltd., 100%)	El Mochito Mine, Santa Bárbara Department	12
Petroleum products	thousand 42-gallon barrels	Refinería Texaco de Honduras, S.A. (Texaco, Inc., 100%)	Puerto Cortés, Cortés Department	5,040
Silver	kilograms	Cía. Minera Santa Bárbara (Breakwater Resources, Ltd., 100%)	El Mochito Mine, Santa Bárbara Department	50
Do.	do.	Cía. Minera El Paso Mining (private, 100%)	La Pochota Mine, Valle Department	20
Steel		Aceros de Honduras, S.A.	Choloma, Cortés Department	14
Zinc		Cía. Minera Santa Bárbara (Breakwater Resources, Ltd., 100%)	El Monchito Mine, Santa Bárbara Department	45